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ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/746,157	GREEN ET AL.
	Examiner	Art Unit	
	William H. Wood	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _22 December 2004_.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-50_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-7,11-14,17,19-25,27-29,31-33,38,41,42 and 46-50_ is/are rejected.

7)☒ Claim(s) _8-10,15,16,18,26,30,34-37,39,40 and 43-45_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office

PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date 051005

DETAILED ACTION

Claims 1-50 are pending and have been examined.

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-7, 11-14, 17, 19-25, 28, 29, 31-33, 38, 41, 42 and 46-50 are rejected

under 35 U.S.C. 103(a) as being unpatentable over **Butterworth** et al. (USPN

5,457,797) in view of **Pree** et al., "Automated Support for Software Development with

Frameworks".

<u>Claim 1</u>

Butterworth disclosed a computing system for creating an extensible N-tiered software

application *(column 5, lines 9-15)*, comprising:

- ♦   a. at least one processing unit *(inherent to executable application software)*;

- ♦   b. at least one memory store operatively connected to the processing unit

    (inherent to executable application software);

- ♦   c. extensible N-tiered creation software *(column 5, lines 9-15)*, executable

    within the at least one processing unit, comprising a plurality of predetermined

    extensible N-tier architecture rules *(column 5, lines 22-24)*; and

- d. at least one extensible tier, capable of residing in the memory store

  (column 25, lines 30), further comprising:

Butterworth did not explicitly state extensible tier comprising: a framework that

specifies a basic design structure for software components categorized as belonging to

the extensible tier, the framework further comprising base software components and a

set of standard interfaces for any software component categorized as belonging to the

tier; and a logically grouped set of a predetermined number of executable software

components compliant with the tier framework, each software component further

capable of communicating with at least one other software component. **Pree**

demonstrated that it was known at the time of invention to utilize frameworks of

components for application development (Abstract), along with standard interfaces

(page 124, section 2.1) and standard predetermined components (Abstract). It would

have been obvious to one of ordinary skill in the art at the time of invention to implement

Butterworth's partionable tier system with tier frameworks and standard components

and interfaces as found in **Pree**'s teaching. This implementation would have been

obvious because one of ordinary skill in the art would be motivated to provide an

improved productivity and software development automation (**Pree**: Abstract).

<u>Claim 2</u>

Butterworth and **Pree** disclosed the computing system of claim 1 further comprising a

communications network, operatively in communication with the processing unit

(column 11, line 63 to column 12, line 19). **Butterworth** and **Pree** did not explicitly state

the communications network selected from the group of networks consisting of local

internal networks, local area networks, asynchronous networks, synchronous networks,

and wide area networks. Official Notice is taken that it was known at the time of

invention to make use of the above said network types. It would have been obvious to

one of ordinary skill in the art at the time of invention to implement **Butterworth** and

Pree's system with the said networks. This implementation would have been obvious

because one of ordinary skill in the art would be motivated to provide the development

environment to N-tier applications in all commonly known environments.

Claim 3

Butterworth and **Pree** disclosed the computing system of claim 1 wherein

communication between the software components comprises asynchronous

communications *(**Butterworth**: column 12, line 20 to column 16, line 14; column 7, line*

67 to column 8, line 8; column 18, lines 18-23; column 18, line 65 to column 19, line 3).

Claim 4

Butterworth and **Pree** disclosed the computing system of claim 1 further comprising an

inventory of software components *(**Pree**: Abstract, first paragraph)*.

Claim 5

Butterworth and **Pree** disclosed the computing system of claim 1 wherein the at least

one extensible tier is a set of extensible tiers *(**Butterworth**: column 11, lines 63-67)*,

further comprising a set of logical connections comprising sequencing and messaging

information between a first one of the extensible tiers and at least one other tier of the

extensible set of tiers, whereby each tier in the extensible set of tiers is capable of

communicating with any other tier through one or more tier interfaces (**Butterworth**:

column 13, line 40 to column 14, line 4; and inherent to tier architecture).

Claim 6

Butterworth and **Pree** disclosed the computing system claim 5 wherein the set of

extensible tiers comprises a base tier comprising a base tier framework, the base tier

framework comprising:

- ◆ a. at least one collection interface for collecting software components (**Pree**:

     page 123, section 1, frameworks made of components), including software

     components which are normally aggregated into other software components

     (**Pree**: page 123, last two paragraphs left column, varying combinations of

     components);

- ◆ b. at least one connection interface for connecting software components as

     sources or sinks of information (**Pree**: page 124, section 2.1, interface);

Butterworth and **Pree** did not explicitly state message-based interface behavior and

control interface. However, Official Notice is taken that it was known at the time of

invention to implement such interfaces as messaging and device controlling. It would

have been obvious to one of ordinary skill in the art at the time of invention to implement

Butterworth and **Pree**'s tier/framework development system with message and control

interfaces. This implementation would have been obvious because one of ordinary skill

in the art would be motivated to use commonly known techniques for developing

software (ie. messaging is known and so is controlling devices).

Claim 7

Butterworth and **Pree** disclosed the computing system of claim 5 wherein the set of

extensible tiers comprises a business rules tier, a processing tier, a data tier, a

messaging tier, a business objects tier, a visual tier, a base tier, a real-time device tier,

an interceptor tier, and an application tier *(Butterworth: column 12, line 20 to column*

16, line 14; column 7, line 67 to column 8, line 8).

Claim 11

Butterworth and **Pree** disclosed the system of claim 7 wherein the data tier comprises

a data tier framework and provides data persistence services for a predetermined set of

software components and access to data *(Butterworth: column 14, line 38 to column*

16, line 14; Figure 14), the data tier framework further comprising:

- a. a data modification interface whereby data may be written to and read from

  a data source *(Butterworth: Figure 14, Data element)*; and

- b. a data access interface whereby access may be provided to specific types

  of data *(Butterworth: column 14, lines 63-66)*.

<u>Claim 12</u>

Butterworth and **Pree** disclosed the system of claim 7 wherein the messaging tier

further comprises a messaging tier framework and messaging software components to

convey information from a source of messages to a recipient of messages

(Butterworth: column 7, line 67 to column 8, line 8; column 10, lines 21-26), the

messaging tier framework further comprising:

- a. a message generation interface *(Butterworth: column 18, lines 18-28)*;

- b. a message queuing interface *(Butterworth: column 20, line 29 to column 22, line 6)*;

- c. a message routing interface *(Butterworth: Figure 4)*;

- d. a message text management interface *(Butterworth: column 20, lines 37-41)*;

- e. a message routing interface whereby one or more software components that will receive a message may be specified *(Butterworth: column 20, line 29 to column 22, line 6)*; and

- f. a message queue interface whereby information about a specific queue may be specified *(Butterworth: column 20, lines 15-19)*;

- g. wherein the messaging software components control message queuing and notification, and support message generation for different types of messages *(Butterworth: column 21, lines 56-59; and column 20, lines 34-36)*.

Claim 13

Butterworth and **Pree** disclosed the method of claim 12 wherein the messaging tier

interface supports asynchronous messaging *(Butterworth: column 12, line 20 to*

column 16, line 14; column 7, line 67 to column 8, line 8; column 18, lines 18-23;

column 18, line 65 to column 19, line 3).

Claim 14

Butterworth and **Pree** disclosed the system of claim 7 wherein the business

components tier further comprises:

- ◆ a. at least one business software component, the business software

  component comprising a general purpose data container providing storage for

  and access to information *(database)*, the business software component

  further encapsulating attributes comprising data and behavior for a business

  entity *(Butterworth: column 10, line 47 to column 11, line 17)*; and

- ◆ b. a business software component framework, comprising:

  - ◆ i. a model comprising a collection of related business software

    components to reflect a real-world business entity *(Butterworth: column*

    10, line 47 to column 11, line 17; and column 12, line 20 to column 16, line

    14); and

  - ◆ ii. a binary large object to allow storage of large amounts of data within the

    business software component *(Butterworth: column 18, lines 10-28; and*

    database).

Claim 17

Butterworth and **Pree** disclosed the system of claim 14 wherein the modal further

comprises a set of business software components model interfaces that the business

software components aggregate to achieve specific functionality *(Butterworth: column

17, lines 4-11).*

Claim 19

Butterworth and **Pree** disclosed the system of claim 7 further comprising a visual tier to

provide display of and user interaction with information, the visual tier using a model,

view, and controller design pattern *(Butterworth: column 15, line 36 to column 16, line

14)* comprising:

- ◆ a. a modeler comprising data and computational logic to handle user

   interaction, the modeler further comprising an event handler, a connection

   source, and a connection sink *(Butterworth: column 15, lines 36-60)*;

- ◆ b. a viewer comprising data and computational logic to present at least a

   portion of a model perceptively to a requestor, the view component further

   comprising an event handler and a connection source *(Butterworth: column

   15, lines 36-60)*; and

- ◆ c. a controller comprising data and computational logic to handle requestor

   interaction, the requestor interaction further comprising actions from an input

   device, the controller component further comprising an event handler, a

connection source, and a connection sink *(Butterworth: column 15, line 61*

to column 16, line 14);

- ◆ d. wherein the modeler, the viewer, and the controller may utilize a

messaging tier whereby each of the modeler, the viewer, and the controller

can have one or more message handlers attached to provide additional

behavior, the modeler and the controller having different message handlers

attached to effect differing behavior *(Butterworth: column 15, line 61 to*

column 16, line 14).

Claim 20

Butterworth and **Pree** disclosed the system of claim 19 wherein the visual tier further

comprises:

- ◆ b. an editing mode, whereby users may edit models as well as view them

(Butterworth: column 15, lines 36-60);

Butterworth and **Pree** did not explicitly teach read-only mode or optional read-only

mode. However, Official Notice is taken that it was known at the time of invention to

utilize a read-only mode and for it to be selectable. It would have been obvious to one

of ordinary skill in the art at the time of invention to implement the multi-tier development

system of **Butterworth** and **Pree** with a visual tier with selectable read-only mode. This

implementation would have been obvious because one of ordinary skill in the art would

be motivated to provide a mechanism commonly used to protect sensitive data (in the

example above from **Butterworth**, perhaps a customer should be prevented from

placing an order unless authorized sales personnel is present).

Claim 21

Butterworth and **Pree** disclosed the system of claim 7 wherein the real-time device tier

further comprises:

- ♦ a. a communication interface *(Butterworth: column 13, line 41 to column 14,*

  line 4); and

- ♦ b. an event-handling interface *(Butterworth: column 13, line 41 to column*

  14, line 4);

- ♦ c. whereby a real-time device can communicate with connected software

  components to support communication with and event handling for a real-time

  device *(Butterworth: column 13, line 41 to column 14, line 4)*.

Claim 22

Butterworth disclosed the method for generating a software application in a computing

system for creating an extensible N-tiered software application comprising at least one

processing unit; at least one memory store operatively connected to the processing unit

(Figures 1-10); extensible N-tiered software *(column 5, lines 9-40; column 16, line 37 to*

column 19, line 35), comprising tier rules *(column 5, lines 16-35; liens 21-23)*, and

application assembly rules *(column 16, lines 43-49)*, the N tiered software being

executable within the at least one processing unit *(Figures 1-10)*; and a predetermined

set of initial extensible tiers capable of residing in the memory store, each tier of the

predetermined set of extensible tiers having a given structure, the set of extensible tiers

further comprising a logically grouped set of a predetermined number of the executable

software components *(column 12, line 20 to column 16, line 14; column 7, line 67 to*

column 8, line 8), the method comprising:

- ◆ a. determining a set of application requirements *(column 16, lines 43-49)*;

- ◆ d. defining a set of tiers to logically model the application requirements

  (column 5, lines 9-55; and column 12, line 20 to column 16, line 14);

- ◆ e. selecting tiers from the predetermined set of tiers to satisfy the defined set

  of tiers *(column 5, liens 21-23; column 12, line 20 to column 16, line 14)*;

- ◆ f. for tiers not within the predetermined set of tiers needed to satisfy the

  defined set of tiers, creating new tiers *(column 5, lines 25-35)*;

- ◆ h. creating a software application by assembling the predetermined set of

  tiers according to the application assembly rules *(column 17, lines 26-33;*

  column 12, line 20 to column 16, line 14);

- ◆ i. whereby the software application satisfies the set of application

  requirements *(column 16, lines 43-49)*.

Butterworth did not explicitly state predetermined set of software component rules; an

inventory of executable software components, each software component further

comprising a given structure and an external interface and further capable of

communicating with at least one other software component; for each of the set of

application requirements, reviewing the inventory of software components for software

components that match at least one of the set of application requirements; for each

application requirement in the set of application requirements for which a software

component match does not exist in the software component inventory, obtaining a

software component that does match that application requirement; and associating each

of the matching software components with at least one tier of the defined set of tiers

according to a framework associated with that tier. **Pree** demonstrated that it was

known at the time of invention to utilize libraries of interchangeable components, either

new or existing in order to full fill an application or "tier" (individual applications)

requirements (entire document). It would have been obvious to one of ordinary skill in

the art at the time of invention to implement **Butterworth**'s tier development system

with frameworks (component rules, inventories of components new and existing for

requirements; and associating components with at least one tier "application zone") as

found in **Pree**'s teaching. This implementation would have been obvious because one

of ordinary skill in the art would be motivated to provide an improved productivity and

software development automation **(Pree**: Abstract).

Claim 23

Butterworth and **Pree** disclosed the method of claim 22 wherein obtaining a software

component that does match that application requirement further comprises selectively

modifying an existing software component or procuring and selectively modifying a new

software component from an independent source of software components to comply

with a tier's framework requirements *(**Butterworth**: column 17, lines 4-11; and **Pree**:

Abstract and page 123, left column, last two paragraphs).*

Claim 24

Butterworth and **Pree** did not explicitly state the method of claim 22 further comprising:

a. examining the obtained software components for incorporation into the software

component inventory according to predetermined incorporation criteria; and

b. storing the obtained software component in the software component inventory if it

meets the incorporation criteria. Official Notice is taken that it was known at the time of

invention to acquire correct version of components. It would have been obvious to one

of ordinary skill in the art at the time of invention to implement the tier development

system of **Butterworth** and **Pree** with acquiring correct versioned components and not

keeping them if they are incorrect. This implementation would have been obvious

because one of ordinary skill in the art would be motivated to provide components which

are satisfactorily compatible with other components, in order to function correctly.

Claim 25

Butterworth and **Pree** disclosed the method of claim 22, wherein at least one of the

software components is a business software component, further comprising

automatically retrieving composite software components along with an associated

business software component when the associated business software component is

retrieved from a persistent store *(Butterworth: column 17, lines 4-11).*

Claim 28

Butterworth and **Pree** disclosed the method of claim 22 further comprising:

- ◆ a. defining a testing tier *(Butterworth: column 19, lines 36-47)*;

- ◆ b. testing a final model using the testing tier *(Butterworth: column 19, lines 36-47)*; and

- ◆ c. correcting errors within the executable software components within the final model *(Butterworth: column 19, lines 36-47)*.

Claim 29

Butterworth and **Pree** disclosed the method of claim 22 wherein associating is accomplished using a graphical user interface *(Butterworth: Figure 23)*.

Claim 31

Butterworth and **Pree** disclosed the method of claim 22 further comprising removing a tier, the step comprising:

a. examining current requirements *(**Butterworth**: column 5, lines 16-34; column 16, lines 43-49)*;

b. for each current tier, determining if at least one other tier satisfies the requirements *(**Butterworth**: column 5, lines 16-34; column 16, lines 43-49)*;

c. if so, combining those tiers *(**Butterworth**: column 5, lines 16-34; column 16, lines 43-49)*;

d. for each remaining tier, determining if the tier is no longer needed to satisfy at least

one requirement *(Butterworth: column 5, lines 16-34; column 16, lines 43-49)*; and

e. if so, remove the no longer needed tier *(Butterworth: column 5, lines 16-34; column 16, lines 43-49)*.

Claim 32

Butterworth and **Pree** disclosed the method of claim 22 further comprising defining an initial set of tiers *(Butterworth: column 12, line 20 to column 16, line 14; column 7, line 67 to column 8, line 8)*.

Claim 33

Butterworth and **Pree** disclosed the method of claim 32, wherein the initial set of tiers comprise a business rules tier, a processing tier, a data tier, a messaging tier, a plotting tier, a business objects tier, a visualization tier, a base tier, a real time device tier, an interceptor tier, and an application tier *(Butterworth: column 12, line 20 to column 16, line 14; column 7, line 67 to column 8, line 8)*.

Claim 38

Butterworth and **Pree** disclosed the method of claim 33 further comprising specifying a framework for the real-time device tier to support communication with and event handling for at least one real-time device, the framework comprising properties and methods that support a predetermined communication interface and a predetermined

event-handling interface whereby a real-time device can communicate with connected

software components *(Butterworth: column 13, line 41 to column 14, line 4).*

Claim 41

Butterworth and **Pree** disclosed the method of claim 33 further comprising:

- ◆ a. specifying a method within the application tier for creating applications that

  use asynchronous behavior *(Butterworth: column 12, line 20 to column 16,*

  line 14; column 7, line 67 to column 8, line 8; column 18, lines 18-23; column

  18, line 65 to column 19, line 3);

- ◆ b. specifying how software components are created and registered

  (Butterworth: column 16, line 14 to column 22, line 57); and

- ◆ c. specifying how service components are connected *(Butterworth: column*

  16, line 14 to column 22, line 57);

- ◆ d. whereby dependencies and communication links are established before an

  application begins responding to events *(Butterworth: column 16, line 14 to*

  column 22, line 57; required for proper execution; column 16, lines 43-49).

Claim 42

Butterworth and **Pree** disclosed the method of claim 33 further comprising specifying a

wizard tier comprising one or more wizards developed for frameworks to insure that

proper framework interfaces are implemented for a software component associated with

a tier, whereby the wizard tier may be used during a development process *(Pree:*

Abstract, second paragraph, active cookbook and recipes).

Claim 49

Butterworth and **Pree** disclose a computer program embodied within a

computer-readable medium created using the method of claim 22 *(column 5, lines 9-*

15).

Claims 46-48 and 50

The method claims 46-48 and 50 correspond to the method claims 22, 28, 29 and 49

respectively. As such, claims 46-48 are rejected in a corresponding manner as claims

22, 28, 29 and 49 respectively.

3.   Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over

Butterworth et al. (USPN 5,457,797) in view of **Pree** et al., "Automated Support for

Software Development with Frameworks" as applied to claim 22 and in further view of

Dale et al. (USPN 6,049,664).

Claim 27

Butterworth and **Pree** did not explicitly teach the method of claim 22 wherein software

components and tiers are combined at run time to form new, unique applications

on-the-fly. **Dale** demonstrated that it was known at the time of invention to implement

on-the-fly runtime tier development (column 2, lines 23-34; column 7, lines 7-11; HTML).

It would have been obvious to one of ordinary skill in the art at the time of invention to

implement the tier development system of **Butterworth** and **Pree** with runtime

tier/component configuration as found in **Dale**'s teaching. This implementation would

have been obvious because one of ordinary skill in the art would be motivated to

provide a system of high flexibility (ie. a system which is always able to change).

Allowable Subject Matter

4.   Claims 8-10, 15, 16, 18, 26, 30, 34-37, 39, 40 and 43-45 are objected to as being

dependent upon a rejected base claim, but would be allowable if rewritten in

independent form including all of the limitations of the base claim and any intervening

claims.

Response to Arguments

5.   Applicant's arguments filed 03 December 2004 have been fully considered but

they are not persuasive. Applicant argued: [1] **Butterworth** failed to disclose extensible

N-tiered creation software or a plurality of predetermined architecture rules; [2] no

disclosure of asynchronous communications between the software components; [3] no

disclosure of messaging information between a first one of the extensible tiers and at

least one other tier; [4] no disclosure of a predetermined set of software component

rules, tier rules and application assembly rules in **Butterworth**; [5] **Butterworth** taught

away from structured rules; and [6] no disclosure of each tier of the predetermined set of

extensible tiers having a given structure, the set of extensible tiers further comprising a logically grouped set of a predetermined number of the executable software components. Upon reviewing the cited prior art and the claimed invention, Applicant's arguments were, respectfully, found unpersuasive.

First, Applicant defines tiers as being a logical chunks of functionality (Specification: page 4, lines 16-18). Therefore, under the broadest reasonable interpretation of Applicant's claims, extensible tier reads upon programmable partitions. Furthermore, rules are specified through at least the fact that the **Butterworth** software system uses default schemes (column 5, lines 22-24).

Second, asynchronous communication is found in **Butterworth** as originally cited, through at least messaging.

Third, messaging is at least disclosed in relation to claim 3 as above indicated. Also, the cited portion in regard to claim 5, demonstrates multiple tiers and machines communicating through messaging.

Fourth, rules are specified in **Butterworth** and **Pree**. Rules related to the tiers are found in column 5, lines 21-23 at least, under the broadest reasonable interpretation of the phrase. Rules for application assembly are found in column 16, lines 43-59, "the logical application definition". Component rules were discussed in combination with **Pree**.

Fifth, the cited portion of **Butterworth** does not prevent developers from instituting their own rules as needed, nor does it concern the broadest reasonable

interpretation of the claims in view of the cited portions of **Butterworth** directed toward ruled behavior mentioned before.

Sixth, in regard to this limitation Applicant contends once again there are not extensible tiers in **Butterworth**. However, this point has been addressed above and is likewise addressed here.

Thus, having addressed all of Applicant's raised issues regarding the claimed invention, the rejections originally stated are maintained here. Rejections under 35 U.S.C. § 112 have been withdrawn.

Conclusion

6.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

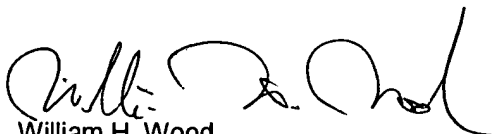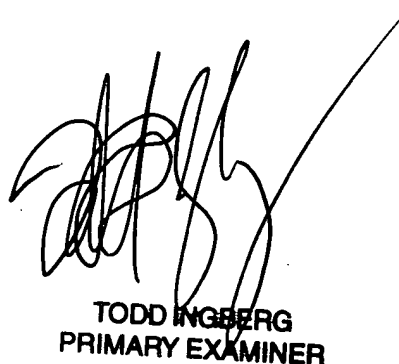## *Correspondence Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Wood whose telephone number is (571)-272-3736. The examiner can normally be reached 9:00am - 5:30pm Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)-272-3719. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9306 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

William H. Wood
May 10, 2005

TODD INGBERG
PRIMARY EXAMINER